```
3241 ACAAGCAGGGATATGTGGGCCACTGGATCTTTGCCAGACTTCCCAGCTGCAGCCAAGTTC
2001  T  S  R  D  M  W  A  T  G  S  L  P  D  F  P  A  A  A  K  F
3301 TTAGGGTTCCGTCAGCGCTGCATCCCCAGGAGCCTCTGCCTCAGTGAGTGTCCTCTGGAG
2021  L  G  F  R  Q  R  C  I  P  R  S  L  C  L  S  E  C  P  L  E
3361 CCCCCAAGCCTCACCCGCCTCTGTGCCACTCTGAAGGACTGCCCGGGACCCCTGGAACTG
2041  P  P  S  L  T  R  L  C  A  T  L  K  D  C  P  G  P  L  E  L
3421 CAATTGTCCTGTGAGTTCCTGAGTGACCAGAGCCTGGAGACTCTACTGGACTGCTTACCT
2061  Q  L  S  C  E  F  L  S  D  Q  S  L  E  T  L  L  D  C  L  P
3481 CAACTCCCTCAGCTGAGCCTGCTGCAGCTGAGCCAGACGGGACTGTCCCCGAAAAGCCCC
2081  Q  L  P  Q  L  S  L  L  Q  L  S  Q  T  G  L  S  P  K  S  P
3541 TTCCTGCTGGCCAACACCTTAAGCCTGTGTCCACGGGTTAAAAAGGTGGATCTCAGGTCC
2101  F  L  L  A  N  T  L  S  L  C  P  R  V  K  K  V  D  L  R  S
3601 CTGCACCATGCAACTTTGCACTTCAGATCCAACGAGGAGGAGGAAGGCGTGTGCTGTGGC
2121  L  H  H  A  T  L  H  F  R  S  N  E  E  E  E  G  V  C  C  G
3661 AGGTTCACAGGCTGCAGCCTCAGCCAGGAGCACGTAGAGTCACTCTGCTGGTTGCTGAGC
2141  R  F  T  G  C  S  L  S  Q  E  H  V  E  S  L  C  W  L  L  S
3721 AAGTGTAAAGACCTCAGCCAGGTGGATCTCTCAGCAAACCTGCTGGGCGACAGCGGACTC
2161  K  C  K  D  L  S  Q  V  D  L  S  A  N  L  L  G  D  S  G  L
3781 AGATGCCTTCTGGAATGTCTGCCGCAGGTGCCCATCTCCGGTTTGCTTGATCTGAGTCAC
2181  R  C  L  L  E  C  L  P  Q  V  P  I  S  G  L  L  D  L  S  H
3841 AACAGCATTTCTCAGGAAAGTGCCCTGTACCTGCTGGAGACACTGCCCTCCTGCCCACGT
2201  N  S  I  S  Q  E  S  A  L  Y  L  L  E  T  L  P  S  C  P  R
3901 GTCCGGGAGGCCTCAGTGAACCTGGGCTCTGAGCAGAGCTTCCGGATTCACTTCTCCAGA
2221  V  R  E  A  S  V  N  L  G  S  E  Q  S  F  R  I  H  F  S  R
3961 GAGGACCAGGCTGGGAAGACACTCAGGCTAAGTGAGTGCAGCTTCCGGCCAGAGCACGTG
2241  E  D  Q  A  G  K  T  L  R  L  S  E  C  S  F  R  P  E  H  V
4021 TCCAGGCTGGCCACCGGCTTGAGCAAGTCCCTGCAGCTGACGGAGCTCACGCTGACCCAG
2261  S  R  L  A  T  G  L  S  K  S  L  Q  L  T  E  L  T  L  T  Q
4081 TGCTGCCTGGGCCAGAAGCAGCTGGCCATCCTCCTGAGCTTGGTGGGGCGACCCGCAGGG
2281  C  C  L  G  Q  K  Q  L  A  I  L  L  S  L  V  G  R  P  A  G
4141 CTGTTCAGCCTCAGGGTGCAGGAGCCGTGGGCGGACAGAGCCAGGGTTCTCTCCCTGTTA
2301  L  F  S  L  R  V  Q  E  P  W  A  D  R  A  R  V  L  S  L  L
4201 GAAGTCTGCGCCCAGGCCTCAGGCAGTGTCACTGAAATCAGCATCTCCGAGACCCAGCAG
2321  E  V  C  A  Q  A  S  G  S  V  T  E  I  S  I  S  E  T  Q  Q
4261 CAGCTCTGTGTCCAGCTGGAATTTCCTCGCCAGGAAGAGAATCCAGAAGCTGTGGCACTC
2341  Q  L  C  V  Q  L  E  F  P  R  Q  E  E  N  P  E  A  V  A  L
4321 AGGTTGGCTCACTGTGACCTTGGAGCCCACCACAGCCTTCTTGTCGGGCAGCTGATGGAG
2361  R  L  A  H  C  D  L  G  A  H  H  S  L  L  V  G  Q  L  M  E
4381 ACATGTGCCAGGCTGCAGCAGCTCAGCTTGTCTCAGGTTAACCTCTGTGAGGACGATGAT
2381  T  C  A  R  L  Q  Q  L  S  L  S  Q  V  N  L  C  E  D  D  D
4441 GCCAGTTCCCTGCTGCTGCAGAGCCTCCTGCTGTCCCTCTCTGAGCTGAAGACATTTCGG
2401  A  S  S  L  L  L  Q  S  L  L  L  S  L  S  E  L  K  T  F  R
4501 CTGACCTCCAGCTGTGTGAGCACCGAGGGCCTCGCCCACCTGGCATCTGGTCTGGGCCAC
2421  L  T  S  S  C  V  S  T  E  G  L  A  H  L  A  S  G  L  G  H
4561 TGCCACCACTTGGAGGAGCTGGACTTGTCTAACAATCAATTTGATGAGGAGGGCACCAAG
2441  C  H  H  L  E  E  L  D  L  S  N  N  Q  F  D  E  E  G  T  K
4621 GCGCTGATGAGGGCCCTTGAGGGGAAATGGATGCTAAAGAGGCTGGACCTCAGTCACCTT
2461  A  L  M  R  A  L  E  G  K  W  M  L  K  R  L  D  L  S  H  L
4681 CTGCTGAACAGCTCCACCTTGGCCTTGCTTACTCACAGACTAAGCCAGATGACCTGCCTG
2481  L  L  N  S  S  T  L  A  L  L  T  H  R  L  S  Q  M  T  C  L
4741 CAGAGCCTCAGACTGAACAGGAACAGTATCGGTGATGTCGGTTGCTGCCACCTTTCTGAG
2501  Q  S  L  R  L  N  R  N  S  I  G  D  V  G  C  C  H  L  S  E
4801 GCTCTCAGGGCTGCCACCAGCCTAGAGGAGCTGGACTTGAGCCACAACCAGATTGGAGAC
2521  A  L  R  A  A  T  S  L  E  E  L  D  L  S  H  N  Q  I  G  D
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FIG. 30C
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4861 GCTGGTGTCCAGCACTTAGCTACCATCCTGCCTGGGCTGCCAGAGCTCAGGAAGATAGAC
2541  A   G   V   Q   H   L   A   T   I   L   P   G   L   P   E   L   R   K   I   D
4921 CTCTCAGGGAATAGCATCAGCTCAGCCGGGGGAGTGCAGTTGGCAGAGTCTCTCGTTCTT
2561  L   S   G   N   S   I   S   S   A   G   G   V   Q   L   A   E   S   L   V   L
4981 TGCAGGCGCCTGGAGGAGTTGATGCTTGGCTGCAATGCCCTGGGGGATCCCACAGCCCTG
2581  C   R   R   L   E   E   L   M   L   G   C   N   A   L   G   D   P   T   A   L
5041 GGGCTGGCTCAGGAGCTGCCCCAGCACCTGAGGGTCCTACACCTACCATTCAGCCATCTG
2601  G   L   A   Q   E   L   P   Q   H   L   R   V   L   H   L   P   F   S   H   L
5101 GGCCCAGGTGGGGCCCTGAGCCTGGCCCAGGCCCTGGATGGATCCCCCCATTTGGAAGAG
2621  G   P   G   G   A   L   S   L   A   Q   A   L   D   G   S   P   H   L   E   E
5161 ATCAGCTTGGCGGAAAACAACCTGGCTGGAGGGGTCCTGCGTTTCTGTATGGAGCTCCCG
2641  I   S   L   A   E   N   N   L   A   G   G   V   L   R   F   C   M   E   L   P
5221 CTGCTCAGACAGATAGACCTGGTTTCCTGTAAGATTGACAACCAGACTGCCAAGCTCCTC
2661  L   L   R   Q   I   D   L   V   S   C   K   I   D   N   Q   T   A   K   L   L
5281 ACCTCCAGCTTCACGAGCTGCCCTGCCCTGGAAGTAATCTTGCTGTCCTGGAATCTCCTC
2681  T   S   S   F   T   S   C   P   A   L   E   V   I   L   L   S   W   N   L   L
5341 GGGGATGAGGCAGCTGCCGAGCTGGCCCAGGTGCTGCCGAAGATGGGCCGGCTGAAGAGA
2701  G   D   E   A   A   A   E   L   A   Q   V   L   P   K   M   G   R   L   K   R
5401 GTGGACCTGGAGAAGAATCAGATCACAGCTTTGGGGGCCTGGCTCCTGGCTGAAGGACTG
2721  V   D   L   E   K   N   Q   I   T   A   L   G   A   W   L   L   A   E   G   L
5464 GCCCAGGGGTCTAGCATCCAAGTCATCCGCCTCTGGAATAACCCCATTCCCTGCGACATG
2741  A   Q   G   S   S   I   Q   V   I   R   L   W   N   N   P   I   P   C   D   M
5521 GCCCAGCACCTGAAGAGCCAGGAGCCCAGGCTGGACTTTGCCTTCTTTGACAACCAGCCC
2761  A   Q   H   L   K   S   Q   E   P   R   L   D   F   A   F   F   D   N   Q   P
5581 CAGGCCCCTTGGGGTACTTGA    (SEQ ID NO:185)
2781  Q   A   P   W   G   T   -   (SEQ ID NO:186)
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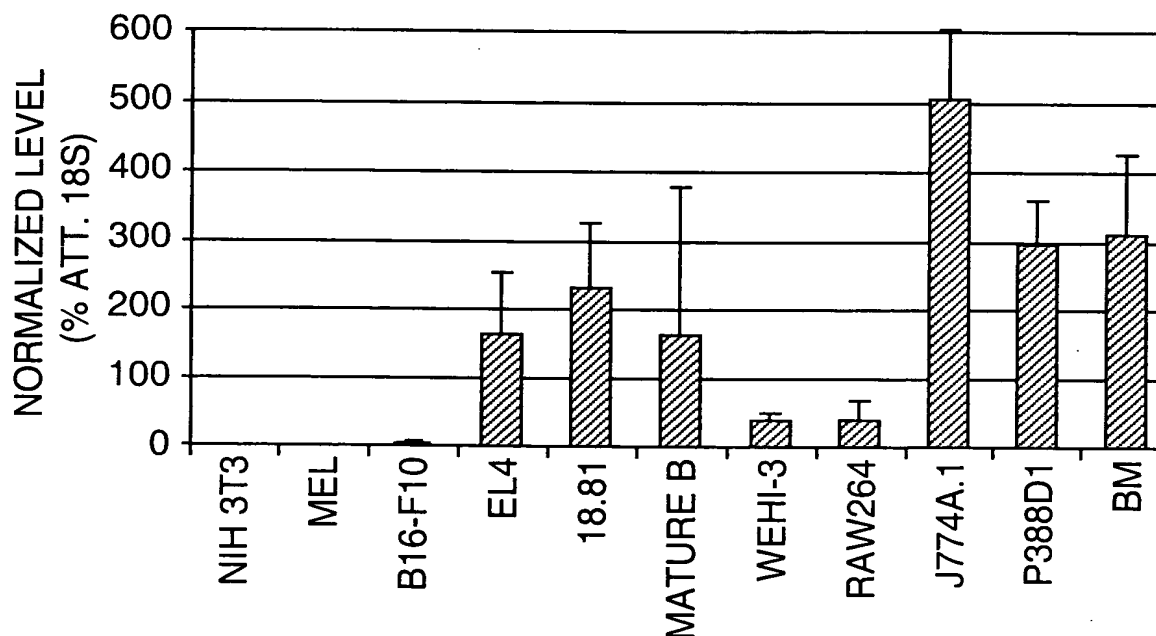
FIG. 30D

FIG. 31A
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